

CURRICULUM VITAE

Dr. J.S. Laura

Professor,

Department of Environmental Sciences,

Maharishi Dayanand University, Rohtak-124001, Haryana (India)

Mobile: +919017125821

E-mail: jslmdu@gmail.com

Academic Qualification:

S.No.	Degree	Institution	Year
1	B.Sc.	D.N College, Hisar Kurukshetra University, Kurukshetra	1985
2	M.Sc. Botany	Department of Botany Kurukshetra University, Kurukshetra	1987
3	Ph.D. Plant physiology	College of Basic Sciences, C.C.S.H.A.U, Hisar	1992

Teaching Experience:

S.No	Organization	Position	From
1	Department of Biosciences, MDU, Rohtak.	Lecturer	1991
2	Department of Biosciences, MDU, Rohtak	Reader	2000
3	Department of Biosciences, MDU, Rohtak	Professor	2008
4	Department of Environmental Science, MDU, Rohtak	Professor	2009

Research Areas of Interest:

- ✓ Environmental monitoring and environmental conservation.
- ✓ Solid waste management and wastewater management in rural communities.
- ✓ Bio fuels
- ✓ Remote sensing and GIS
- ✓ Tissue culture

Research Projects/Grants:

S.No.	Title	Sponsoring Agency and Officer concerned	Period	Amount (Lakh)	Achievements
1	“Effect of cadmium on hydrolytic enzymes during seed germination in <i>Pisum sativum</i> ”	UGC	2002	0.25	Completed

2.					
2	“In vitro & In vivo studies on micropropagation, transformation & camptothecin in <i>Nothapodytes foetida</i> ”	UGC	2010-2013	11.7	Completed
3	In vitro propagation of <i>Simmondsia chinensis jojoba</i>	MDU	2013-2014	0.5	Completed
4	“Spatial distribution of Uranium in Groundwater and drinking water in Rohtak, Bhiwani, Jhajjar, Rewari and Mahendergarh districts of Haryana.”	BRNS	2016-2018	26.9	Completed
5	“Spatial distribution of Uranium in Groundwater and drinking water in Bikaner and Nagaur districts of Rajasthan.”	BRNS	2018-2021	27.5	Completed
6	“Spatial distribution of Uranium in Groundwater and drinking water in Jhunjhunu and Churu districts of Rajasthan.”	BRNS	2017-2019	21.76	Completed
7	National Carbonaceous Aerosols Programme- Carbonaceous Aerosol Emissions, Source Apportionment and Climate Impacts (NCAP-COALESCE)	MOEFCC	2018-2021	Collaborating partner with IIT Bombay	Completed

Research Guidance:

Ph.D. Supervision: 13+10

PG Dissertation Supervision: 30 (2019-2023)

Research profile:

Total Article: 91

Book Chapter: 14

Scopus ID : <https://www.scopus.com/authid/detail.uri?authorId=6602630455>

Web of Science Researcher ID:

(1) GQR-2554-2022 (<https://www.webofscience.com/wos/author/record/32992773>)

(2) JCN-8408-2023 (<https://www.webofscience.com/wos/author/record/48696675>)

ORCID: <https://orcid.org/0000-0001-5717-9089>

<https://orcid.org/0000-0003-0186-6618>

ResearchGate profile:

Conferences/workshops attended:

National: 25

International: 10

Conferences/workshops Organised:

Publication List			
S.No.	Title	Journal	Year
1.	A Comprehensive Review on the Techniques and Indexes Used for the Analysis of Fluorosis in Humans and Cattle.	Oriental Journal of Chemistry	2023
2.	Outdoor γ -radiation: seasonal variation and health risk assessment associated with its exposure in northern districts of Haryana, India	Journal of Radioanalytical and Nuclear Chemistry	2023
3.	Optical Properties and Refractive Index of Wintertime Aerosol at a Highly Polluted North-Indian Site	Journal of Geophysical Research: Atmospheres	2023
4.	Optimal composition of biomass pellet for enhancing calorific value using MOGA-ANN: a mixture of paddy straw, sawdust, cow dung, and paper pulp	Biomass Conversion and Biorefinery	2023
5.	Qualitative Phytochemical Screening of Medicinal Plants Using Different Solvent Extracts.	Oriental Journal of Chemistry	2023
6.	Mapping of outdoor gamma radiation and consequential health risk assessment in north-eastern regions of Rajasthan, India	Environmental Forensics	2023
7.	Uranium Sources, Uptake, Translocation in the soil-plant System and Its Toxicity in Plants and Humans: A Critical Review.	Oriental Journal of Chemistry	2023
8.	Fluoride and nitrate in groundwater: a comprehensive analysis of health risk and potability of groundwater of Jhunjhunu district of Rajasthan, India	Environmental Monitoring and Assessment	2023
9.	Assessment of groundwater potability and health risk due to fluoride and nitrate in groundwater of Churu District of Rajasthan, India	Environmental Geochemistry and Health	2023
10.	Analysis of effective equivalent dose to the organs and cancer risk assessment due to natural outdoor gamma radiation in Eastern Thar Desert, India	International Journal of Environmental Analytical Chemistry	2022
11.	Comparative Analysis of Compost Quality Produced from Fungal Consortia and Rice Straw by Varying C/N Ratio and its Effect on Germination of <i>Vigna radiata</i>	Nature Environment and Pollution Technology	2022

12.	A comprehensive analysis of health risk due to natural outdoor gamma radiation in southeast Haryana, India.	Current Science	2022
13.	Study on heavy metals in some Ayurvedic herbal products and risk assessment of their calculated average daily dose intake in humans	Journal of Herbal Medicine	2022
14.	Optimization of nutritional and physical parameters for enhancing the keratinase activity of <i>Bacillus cereus</i> isolated from soil of poultry dump site in Gurugram, Haryana	Bioresource Technology Reports	2022
15.	Review on the use of Microalgae Biomass for Bioplastics Synthesis: A Sustainable and Green approach to control Plastic Pollution	Pollution	2022
16.	Understanding the Influence of Meteorology and Emission Sources on PM _{2.5} Mass Concentrations Across India: First Results From the COALESCE Network	Journal of Geophysical Research: Atmospheres	2022
17.	Role of informal sector in the dynamics of municipal solid waste compositional change from household to dumpsite	International Journal of Environment and Waste Management	2022
18.	Spatial distribution of uranium in groundwater and its health risk assessment in Haryana, India	Rasayan Journal of Chemistry	2022
19.	Potential Use of Some traditional plants extracts against <i>Fusarium wilt</i> disease of chickpea (<i>Cicer arietinum L.</i>)	Journal of Food Legumes	2021
20.	Potential Use Of Some Plant Extracts As Bio-Protectant Against Black Rot Of Onion (<i>Allium cepa L.</i>)	National Journal of Life Sciences	2021
21.	Large scale production of female plants of <i>Simmondsia chinensis</i> (link) <i>Schneider</i> through synthetic seed technology	Plant Cell Biotechnology Molecular Biology	2020
22.	In vitro propagation of female <i>Simmondsia chinensis</i> (Link) <i>Schneider</i> -a thar desert shrub	Annals of Biology	2020
23.	Vegetative Propagation of <i>Simmondsia chinensis</i> (Link) <i>Schneider</i> through Stem Cuttings–A Dioecious Shrub	Annals of Biology	2020
24.	Spectral Monitoring and Quantification of <i>Chlorella sorokiniana</i> for Biomass Production	Annals of Biology	2020
25.	Effect of Adenine Sulphate on Shoot Multiplication of <i>Simmondsia chinensis</i> (Link) <i>Schneider</i>	Annals of Agri-Bio Research	2020
26.	Geostatistical approach using kriging for assessing spatial distribution of ground water nitrate in proximity to a solid waste dump site, Rohtak city, Haryana, India	Aut Aut Research Journal	2020

27.	Spatiotemporal distribution of Fluoride in groundwater of five South-West districts of Haryana, India.	Aut Aut Research Journal	2020
28.	Effect of Different Light Sources and Wavelengths on Biomass and Lipid Profile of <i>Chlorella sorokiniana</i>	Annals of Agri-Bio Research	2020
29.	Potential Use Of Some Traditional Plants-Extracts As Bioprotectant Against <i>Xanthomonas citri Sub Sp Citri</i> .	National Journal of Life Sciences	2020
30.	Directs adventitious shoot bud regeneration and ex vitro rooting in leaf explants of female <i>Simmondsia chinensis</i> (Link) Schneider-An important industrial shrub	Asian Journal of Microbiology Biotechnology and Environmental Sciences	2019
31.	<i>Agrobacterium rhizogenes</i> mediated hairy root induction in endangered <i>Nothapodytes foetida</i>	Journal of Pharmacognosy and Phytochemistry	2019
32.	An assessment of Anticipated Pollution Index of Some Common Plants and Trees of Rohtak City of Haryana (India)	Rasayan Journal of Chemistry	2019
33.	Risk assessment of some herbal powders and herbal formulations contaminated with heavy metals	International Journal of Pharmaceutical Sciences and Research	2019
34.	Potential Use Of Some Traditional Plants Extracts As Bio-protectant Against Tundu Diseases Of Wheat	National Journal Of Life Sciences	2019
35.	Potential Use Of Some Plant Extracts Against Foot Rot Of Rice (<i>Oryza Sativa L.</i>)	Oryza-An International Journal On Rice	2018
36.	GIS Based Modeling Using Analytic Hierarchy Process (AHP) For Optimization Of Landfill Site Selection Of Rohtak City, Haryana (India)	Journal Of Applied And Natural Science	2018
37.	Effect of ZnO Nanoparticles On Seed Germination And Seedling Growth In Wheat (<i>Triticum aestivum</i>)	Journal Of Pharmacognosy and Phytochemistry	2018
38.	Effect Of Change In Trans-Membrane Pressure Differences On The Efficiency Of A Thin Film Reverse Osmosis Membrane.	IOSR Journal of Engineering	2018
39.	A Case Study On Municipal Solid Waste Management System Of Rohtak City, Haryana, India.	IOSR Journal Of Engineering	2018
40.	Effect Of Cadmium On Respiration And Enzyme Activity In Germinating Pea (<i>Pisum sativum</i>) Seeds	Research Journal Of Life Sciences, Bioinformatics, Pharmaceutical and Chemical Sciences	2018
41.	Effect Of Heavy Metals Cadmium, Nickel And Lead On The Seed Germination And Early Seedling	Research journal of Life Sciences, Bioinformatics, Pharmaceutical and Chemical	2018

	Growth Of <i>Pisum sativum</i>	Sciences	
42.	Biofortification Of Crops Using Nanoparticles To Alleviate Plant And Human Zn Deficiency: A Review	Research Journal Of Life Sciences, Bioinformatics, Pharmaceutical And Chemical Sciences	2018
43.	Selection Of Collection Sites And Optimization Of Waste Bins Of Rohtak City, Haryana (India)	International Journal of Engineering Research and Development	2018
44.	Efficient In vitro direct regeneration from nodal explants of <i>simmondsia chinensis</i> (Link) Schneider-A potential multipurpose plant	Plant Cell Biotechnology and Molecular Biology	2018
45.	Assessment Of Viability And Enhancement Of Germination Potential Of Jojoba Seeds Under In Vitro Condition Using Plant Growth Regulator	Plant Cell Biotechnology and Molecular Biology	2017
46.	Potential Use Of Traditional Plant Species Against <i>Xanthomonas campestris</i> Pv. <i>Campestris</i>	National Journal of Life Science	2017
47.	Study On Some Heavy Metal Intake Through The Recommended Medication Dosage Of Some Ayurvedic Herbs And Formulations	International Journal of Current Research	2016
48.	A Comparative In Vitro Propagation Studies On Different Explants Of <i>Salvadora Oleoides</i> Decne. An Endangered Plant	International Journal of Current Microbiology and Applied Sciences	2016
49.	Phyto-Diversity On Campus Of Km Government College Narwana, India	International Journal of Current Microbiology and Applied Sciences	2016
50.	Validation of MODIS Aerosol Optical Depth Retrieval with AERONET Data	Journal of basis and Applied Engineering Research	2015
51.	Application of Geospatial Technology to Municipal Waste Generation Estimation: A case Study of Rohtak, India	Journal of Energy Research and Environmental Technology	2015
52.	Effect of various soil medium on seed germination of <i>simmondsia chinensis</i> (link) Schneider (jojoba) under in vivo conditions	International journal of Pharma and Bio Science	2015
53.	An Efficient And Reproducible Indirect Shoot Regeneration From Female Leaf Explants Of <i>Simmondsia chinensis</i> , A Liquid-Wax Producing Shrub	Physiology And Molecular Biology Of Plants	2015
54.	Study on seed germination and vegetative propagation of <i>Salvadora oleoides</i> Decne	International Journal Of Current Research	2014
55.	Effect Of Cadmium On Growth, Yield And Dry Matter Accumulation In <i>Cajanuscajan L</i>	International Journal Of Current Research	2014
56.	Effect Of Sewage Irrigation On Yield Of Pea And Pigeon Pea	Journal Of Integrated Science And Technology	2014
57.	Isolation And Assessment Of Biodegradation	International Journal Of	2014

	Potential Of Fungal Species Isolated From Sludge Contaminated Soil.	Current Microbiology And Applied Sciences	
58.	Distribution Of Camptothecin Through The Plant Kingdom	International Journal of Current Research	2014
59.	Application Of GIS In MSW Management In India	International Journal Of Engineering Research And Development	2014
60.	Spatial And Temporal Distribution Of Nitrate (No ₃ -) In Groundwater Of Rohtak Municipality Area	International Journal of Engineering Research and Development	2014
61.	Influence Of Organic And Synthetic Fertilizers On Soil Physical Properties	International journal of Current Microbiology and Applied Sciences	2014
62.	Avifauna Species Diversity And Their Abundance In Tilyar Lake, Rohtak, Haryana (India)	Bulletin Of Environment. Pharmacology Life Sciences	2013
63.	Fluoride Distribution In Groundwater And Prevalence Of Dental Fluorosis Among School Children In Villages Of Jind District, Haryana (India)	International Journal Current Research	2013
64.	Micropropagation Of <i>Simmondsia chinensis</i> (Link) Schneider: A Review On The Regeneration Potential Of Different Explants	International Journal Of Current Research	2013
65.	Avian And Plant Species Diversity And Their Interrelationship In Tilyar Lake, Rohtak (Haryana)	Bulletin of Environment Pharmacology Life Sciences	2012
66.	Effect Of Plant Species On Domestic Waste Water Decontamination Using Constructed Wetlands	Inventi Impact: Water & Environment	2012
67.	Micropropagation Of <i>Salvadora oleoides</i> Decne Through Shoot Tip Explants	Researcher	2012
68.	In Vitro Studies On Direct Regeneration Of <i>Nothapodytes foetida</i> Using Shoot Tip And Nodal Explants.	Journal Of Non-Timber Forest Products	2012
69.	In vitro plant regeneration in <i>Salvadora oleoides</i> Decne from cotyledonary node	Annals of Agri Bio Research	2012
70.	An Efficient Plant Regeneration Protocol From Petiole Explants Of Physic Nut (<i>Jatropha curcas</i> L.)	African Journal Of Biotechnology	2012
71.	In vitro effect of sterilizing agents on contamination and regenerability of <i>Jatropha curcas</i> seed: A biofuel plant	International journal of Pharmaceutical Sciences Review and Research	2011
72.	Natural Antioxidant Potential Of Some Indian Plants – A Review	Inventi Rapid: Ethnopharmacology	2011
73.	Pharmaceutical Potentials And Biotechnological Interventions For Crop Improvement Of <i>Jatropha curcas</i>	Inventi Rapid: Ethnopharmacology	2011

74.	Drought And Salt Tolerance Screening Of Papaya (<i>Carica papaya L.</i>) Cultivars Using In Vitro Techniques	Acta Horticulturae	2010
75.	Antifungal activity of some plant extracts against <i>Chaetomium globosum</i>	Journal of Pure and Applied Microbiology	2009
76.	Antifungal Properties Of Some Plant-Extracts Against <i>Chaetomium globosum</i> .	International Journal Of Agricultural Sciences	2009
77.	Antibacterial Activity Of Some Plant-Extracts Against Plant Pathogenic Bacteria <i>Xanthomonas campestris Pv. Campestris</i>	Indian Journal Of Agricultural Research	2009
78.	Antibacterial activity of some plant extracts against <i>Rathyibacter tritici</i>	Biosciences Biotechnology Research Asia	2008
79.	Potential Use Of Some Plant-Extracts Against <i>Fusarium moniliforme</i>	Oryza-An International Journal On Rice	2008
80.	Antibacterial Activity Of Some Plantextracts Against Pathogenic Bacteria <i>Erwinia carotovora</i> Subsp. <i>Carotovora</i>	Potato Journal	2008
81.	Antifungal potential of some botano-extracts against <i>Alternaria brassicae</i>	Journal of Plant Disease Sciences	2007
82.	Anti-fungal Activity of Botano-extracts against <i>Penicillium expensum</i>	Int. J. Trop. Agri.	2007
83.	Dark treatment effects on nitrogen fixation and enzymes associated with scavenging hydrogen peroxide in clusterbean nodules	Plant physiology and biochemistry	1994
84.	Photosynthetic carbon reduction cycle metabolites and enzymes of sucrose and starch biosynthesis in developing <i>Brassica</i> pods.	Indian Journal of Biochemistry & Biophysics	1993
85.	Nitrate induced nodule senescence and changes in activities of enzymes scavenging H ₂ O ₂ in clusterbean (<i>Cyamopsis tetragonaloba Taub.</i>)	Journal of plant physiology	1993
86.	Ontogenic changes in photosynthetic carbon reduction cycle metabolites and enzymes of sucrose metabolism in <i>Brassica campestris</i> pods	Photosynthetica (Czech Republic)	1993
87.	Effect of Cadmium on Carbon and Nitrogen Partitioning and Dry Matter Production in Pigeonpea (<i>Cajanuscajan L.</i>).	Plant Physiology	1991
88.	Photosynthetic carbon fixation, translocation and metabolite levels in pigeonpea (<i>Cajanus cajan L.</i>) leaves exposed to excess cadmium	Indian journal of experimental biology	1991
89.	Effect of salinity, salinization and desalinization on flowering and various yield parameters in pea (<i>Pisum sativum L.</i>) and chickpea (<i>Cicer arietinum L.</i>).	International journal of tropical agriculture	1990
90.	Effect of cadmium and nickel on germination, early seedling growth and photosynthesis of wheat and	International journal of tropical agriculture	1990

pigeonpea.		
------------	--	--

Book Chapters				
S.No.	Title	Book	Publisher/ ISBN	Year
1.	Water conservation for environmental sustainability	Water, the Environment and the Sustainable Development Goals	Elsevier/ 9780443153556	2024
2.	Uranium in groundwater is an emerging concern in Rajasthan, India: A study of distribution , potential sources, health impacts and management strategies	Environmental Metagenomics, Water Quality And Suggested Remediation Measures of Polluted Waters: A Combined Approach	Elsevier/ 9780443136597	2024
3.	A comprehensive analysis of fluoride contamination in groundwater of rural area with special focus on India	Water Resources Management for Rural Development	Elsevier/ 9780443187780	2024
4.	Prevalence of Uranium in groundwater of rural and urban regions of India	Water Resources Management for Rural Development	Elsevier/ 9780443187780	2024
5.	Conventional methods and materials used for water treatment in rural areas	Water Resources Management for Rural Development	Elsevier/ 9780443187780	2024
6.	Nanofiltration Membrane Techniques for Heavy Metal Separation	Modern Nanotechnology: Volume 1: Environmental Sustainability and Remediation	Springer/ 9783031311116	2023
7.	Microalgae Biofuels: Challenges and Potential	Biomass and Bioenergy Solutions for Climate Change Mitigation and Sustainability	IGI Global/ 9781668452714	2023
8.	Constructed wetland: A Decentralized Wastewater Treatment System	India@75 Research and development	Iterative International Publishers/ 9789357473217	2023
9.	Microbial Inoculants: An Invasive Approach for the Bioremediation of Soil Contaminated with Heavy Metals	Microbial and Biotechnological Interventions in Bioremediation and Phytoremediation	Springer/ 9783031088308	2022
10.	Mercury pollution and its bioremediation by microbes	Microbes and Microbial Biotechnology for Green Remediation	Elsevier/ 9780323904537	2022
11.	Plastic Waste Management in Rural Areas Around the World	Plastic Waste Management: Turning Challenges into Opportunities	Bharti Publications/ 9789391681067	2022
12.	Effect of Cadmium on Plant Physiological and Metabolic Processes.	Trends in Technology for Agriculture, Food, Environment and Health	Agrobios/ 9788194748076	2020

13.	Cadmium Uptake and its Effect on Plant Growth: A Review	Emerging Technologies Towards Agriculture, Food and Environment	Agrobios (International) 9789381191224	2019
14.	In vitro and in vivo multiplication of Jatropha curcus	Jatropha learning course	Centre for Jatropha Promotion and Bio diesel	2008